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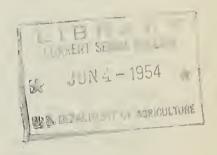
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Ag 84Pro Esp. 5

## The 1952 Cotton Goal: 16 Million Bales From 28 Million Acres

- ... Higher Yields Per Acre Through Improved Practices
- ... More Efficient Froduction, Larger Net Returns
- ... Modern Mechanical Methods Mean More Cotton Per Man Hour

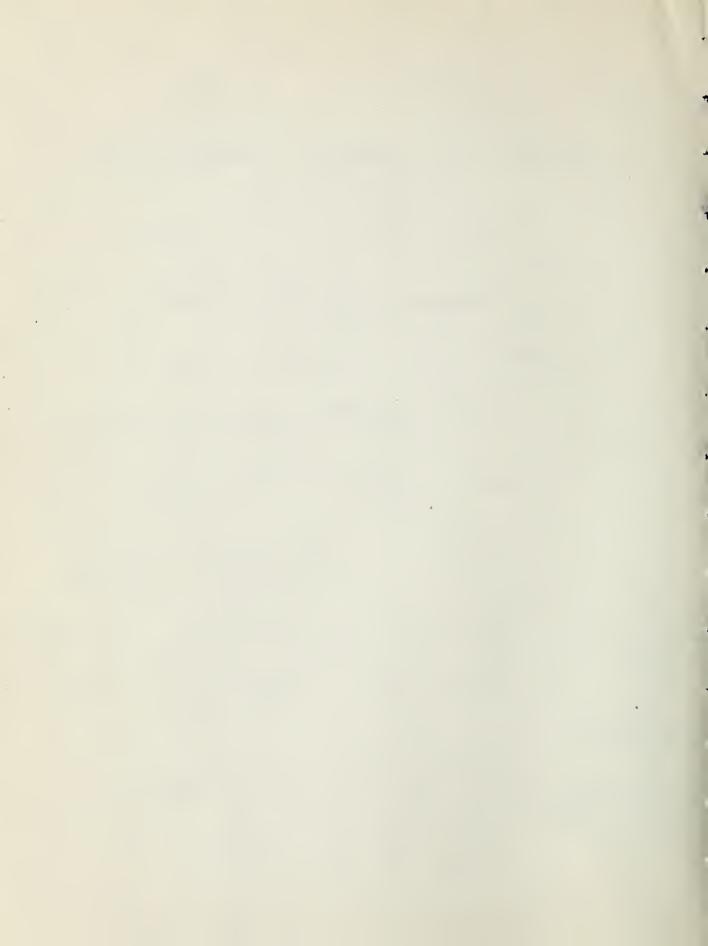


### PRODUCTION AND MARKETING ADMINISTRATION

U. S. DEPARTMENT OF AGRICULTURE

Washington, D. C. PA -194

February 1952



#### THE 1952 COTTON GOAL: 16 MILLION BALES FROM 28 MILLION ACRES

The cotton production goal for 1952 is 16,000,000 bales, about the same production that was called for in 1951. Present indications are that the need for a large cotton crop in 1952 is fully as great as it was in 1951.

The 16,000,000-bale goal for 1952 reflects the continuing need for large cotton crops during the period of high-level business activity and consumer income, in order to (a) supply the strong civilian demands for cotton and its products; (b) meet the requirements for additional quantities of cotton in the defense program; and (c) fill export demands of friendly foreign countries. If we do not produce cotton in quantities sufficient to supply these domestic and foreign demands, we will again be forced to limit exports to quantities we can spare, or be faced with insufficient supplies for our own civilian and defense needs. Such restrictive measures could ultimately mean a permanent loss in the total market for cotton.

Tight supplies of cotton not only distort price-quality relationships, but also promote and accelerate production of synthetic fibers both at home and abroad. These losses of cotton markets, particularly to synthetics, are extremely difficult to regain. Ample but not burdensome supplies of cotton, produced efficiently at prices fair to both producer and consumer, are needed to protect cotton's long-range interest from loss of markets to other growths and other fibers.

In some areas and on many farms higher cotton prices have not been adequate to compensate for higher costs of materials and facilities and other expenses incident to producing cotton. Despite higher production costs, however, the net return per acre from cotton growing can be maintained or increased on a great many cotton farms by measures which produce higher yields. Therefore, cotton farmers are urged to select the land best adapted to cotton production and to make the best possible use of all available facilities in 1952, in order that another large cotton crop may be produced efficiently and with larger net returns to growers.

### Why a 16,000,000-Bale Cotton Crop is Needed in 1952

The indicated supply of cotton for the present marketing year (beginning August 1, 1951) is about 17,690,000 running bales. This supply consists of a carryover on August 1, 1951, of 2,278,000 bales, a 1951 crop (December Crop Report) of 15,212,000 bales, and estimated imports of about 200,000 bales of special types. The requirements for the year are estimated at 15,500,000 bales - about 9,700,000 bales for domestic consumption and approximately 5,800,000 for export. According to these

estimates of supplies and requirements, the carryover on August 1, 1952, will amount to about 2,190,000 bales, or slightly less than the 1951 carryover. This would be the smallest carryover of cotton since 1924. At the average rate of consumption during the 1950-51 year, the 2,190,000 bales expected to be on hand August 1, 1952, would constitute 2-1/2 months' supply for domestic mills.

According to present information, the current relatively large domestic and foreign demand for cotton should continue during the marketing year beginning August 1, 1952. Analyses of the major factors affecting domestic demand indicate that United States consumption in 1952-53 should require about 10,000,000 bales. Study of available information on the foreign situation points toward exports during 1952-53 of approximately 5,500,000 bales. Total 1952-53 requirements for domestic consumption and for export are placed at about 15,500,000 bales. Therefore, we need a 16,000,000-bale crop in 1952 to supply 15,500,000 bales for domestic and export demands and to increase end-of-year stocks to a more comfortable level during this period of high economic activity and expanding defense requirements.

#### The Source of Our Cotton Supplies for 1952-53

Since stocks of cotton on August 1, 1952, are expected to be close to minimum levels, most of the cotton for meeting the 1952-53 requirements must be supplied by production from the 1952 crop. A crop of at least 15,300,000 bales, supplemented by usual imports of about 200,000 bales, will be needed to maintain ending stocks on July 31, 1953, at the 1952 level. However, because of the ever-present hazards of unfavorable weather and heavy insect damage, such as occurred in 1950, the reserve stocks of cotton should not be permitted to drop to bare minimum levels, even in normal times. From the standpoint of present high levels of domestic and export offtake and the present unsettled world conditions, there is a need to increase our reserve stocks of cotton to more desirable levels than the expected carryover on next August 1. On the basis of the above estimates of requirements for 1952-53, a cotton crop of 16,000,000 bales in 1952 would be sufficient to meet estimated domestic and export requirements and to increase the ending stocks to approximately 2,890,000 bales, which is by no means an excessive carryover under present conditions.

#### Needed in 1952 - Higher Yields

The 1952 acreage goal for the production of 16,000,000 bales of cotton is 28,000,000 acres. The 1952 production goals are based on an assumed national yield of 280 pounds of lint per planted acre (acreage in cultivation on July 1). This yield is higher than the average yield for any consecutive 5-year period of recent history. However, a long-term upward trend is apparent in cotton yields, reflecting improved farming

practices, more careful selection of land, shifts to higher yielding reas, and other contributing factors.

More extensive application of the practices and techniques that contribute to high per acre yields will be needed in 1952 to attain the 16,000,000-bele production goal under normal weather conditions. On most farms the application of improved cultural practices in land selection, fertilization, weed and insect control, and harvesting will produce higher yields per acre. Higher yields contribute directly to efficient production and larger returns to the grower. The production of more cotton per acre holds down or reduces the per pound production cost. More general substitution of machinery for scarce hand labor, particularly in hoeing and harvesting, cuts down the big cost item in cotton production.

#### Measures for Increasing Yields, Improving Efficiency

Measures that prove most effective in building up per acre yields and keeping down prohibitive increases in cost, differ from area to area and from farm to farm. Because of these differences in local conditions, the safest and most practical procedure for producers interested in proved methods of increasing cotton yields without prohibitive increases in costs is to consult with local leaders, including county agricultural agents and PMA Committeemen.

On many cotton farms, the per bale cost of production can be reduced by the adoption of measures which contribute to higher yields per acre without increasing costs. It is true that the cost of certain items, such as insect control, fertilizer, hand harvesting, and irrigation increases with higher yields. Generally, however, such increases in cost, if incurred by following recommended practices, are more than offset by higher yields and larger net returns. For example, virtually the same operations are often required to grow an acre of cotton that yields one-fourth bale as for an acre that produces a bale. About the same per acre expense is involved for land preparation, seed, planting, cultivating; and, with mechanical harvesting, almost the same time and machine cost for harvesting are required, regardless of the yield.

Among the practices that are recommended and that generally contribute substantially to increased cotton yields and larger profits are the following:

- 1. Plant cotton on land suited to cotton production; plan rotation to let cotton follow a fertilized legume where practicable.
- 2. Control weeds and grass and conserve moisture by timely cultivation and other conservation practices.

- 3. Select an adapted variety early, use good-quality seed, and treat seed to reduce disease. Use of mechanically delinted or chemically delinted planting seed is increasing.
- 4. Inspect fields early and often for insects, and follow recommended control measures throughout the season. Don't delay control measures until insect infestation is heavy. Prepare for more than one application of insecticide.
- 5. Purchase in advance sufficient supplies of fertilizer and insecticides to follow recommended practices; prepare equipment for using them.
- 6. Harvest early and carefully; insist on efficient ginning and cooperate with your ginner to that end.
- 7. Arrange to market your cotton in an orderly manner; consider the advantages of the CCC loan program.

In most areas of the Cotton Belt, more complete mechanization of cotton production and harvesting is one of the most effective means of reducing the largest cost item - hand labor. Indications are that farm laborers will be scarce again in 1952. In areas and on farms where applicable, practices that will reduce hand labor requirements include the following:

- 1. Thorough land preparation by multiple-row equipment and tractor power.
- 2. Precision spacing of seed in planting to insure a stand with the minimum amount of hand chopping. Also, cross-cultivation in some areas to eliminate hand chopping.
- 3. Use of pre-emergence spraying with chemical weed killers.
- 4. Use of tractor-mounted rotary hoe to kill small weeds and grass in the row.
- 5. Use of flame cultivation. (Caution: Investigate fully, make sure equipment is properly adjusted, and test this operation on a small scale before using it extensively.)
- 6. Defoliation of plants wherever foliage impedes hand or mechanical harvesting.
- 7. More extensive use of mechanical pickers and strippers where gin machinery is adequate for cleaning the cotton, including more extensive custom harvesting with mechanical pickers. (Caution: Row widths must be properly spaced for two-row mechanical harvesters.)

# The Outlook for Materials and Facilities for a 16.000,000-Bale Cotton Production Goal

The attainment of the 16,000,000-bale cotton production goal from 28,000,000 acres in 1952 depends in very large measure on normal or better weather conditions during the growing and harvesting season. Weather hazards and consequent insect damage cannot be predicted or completely overcome. However, the upward trend of cotton yields which has been under way for several years can be further increased, under normal weather conditions, by more general adoption of practices already proved to be effective.

Obtaining the highest practicable yield on each acre planted to cotton in 1952 is a challenge of double importance to producers. In the first place, the national yield per acre on which the goals are based is above the average for any recent 5-year period. Moreover, the cotton acreage and production goals for 1952 will have to be achieved with somewhat less than adequate supplies of certain production materials and facilities, at least during seasons of greatest demand for the facilities. Therefore, early purchase and efficient use of materials such as fertilizer, pesticides, machinery, equipment, and spare parts, are essential in making the most effective distribution and use of the available supplies.

#### Fertilizer

Although slightly more commercial fertilizer may be available in 1952 than in 1951, the demand is expected to exceed the available supply. According to the latest estimates of the Department, the supply of nitrogen will be up 6 or 7 percent from last year. Potash production is expected to increase about 5 percent over 1951, but phosphate supplies will be approximately 6 percent smaller because of the severe sulfur shortage. According to some industry reports, supplies of fertilizer are backing up in trade channels early in 1952, particularly in the South, because farmers and distributors have been slow in ordering their anticipated requirements for this year. For this reason, it is very important that producers purchase in advance at least a part of their 1952 fertilizer requirements. Trade and distribution channels are not adequate to store the entire year's needs for fertilizer. Consequently, full and efficient use of the fertilizer manufacturing and distribution facilities depends on early purchases by farmers.

#### Pesticides

Present indications are that the supply of cotton pesticides will be adequate for the 1952 crop, provided distribution channels are kept open by orderly purchases by farmers in advance of the earliest date the materials will be needed. Delay by growers in buying at least a part

of the anticipated or average needs for the year is likely to result in local or seasonal shortages during the period of heaviest demand. Insect infestations, particularly of boll weevils, generally were very light in 1951. But light infestation last year does not prove that damage from this insect and others will again be minor in 1952. As a result of unpredictable weather, the reverse may be true. Therefore, every producer who can do so is strongly urged to purchase early and store a supply of pesticides adequate for the control of at least an average infestation of the insects most common in his locality.

Careful and regular inspections of the cotton plants for insect damage from the time the seedlings appear are recommended. The degree of infestation at which control measures should begin, even in a given locality, is different for various insects and for different stages of the crop. Recommendations on this are always available from representatives of the Bureau of Entomology and Plant Quarantine, county agents, and pesticide dealers. By following proved practices on both field inspections and the kind. quantity to use, and method of applying pesticides, cotton producers can prevent insects from getting out of hand.

Insufficient supplies of pesticides containing sulfur are expected to be more serious than for other types. There is reason to believe, however, that shortages of dusting sulfur will be relieved by further substitution of spray-type pesticides made from synthetic organic materials such as parathion, TEPP or Aramite, EPN, and other trade-name meterials. Calcium arsenate supplies should be adequate. The same is true of the chlorinated hydrocarbon insecticides, such as DDT, benzene hexachloride, toxaphene, aldrin, and dieldrin, unless unexpected changes occur in the chlorine supply situation. Cans and drums, particularly for liquid pesticides, although adequate early in 1952, may become scarce later.

Cotton weed killers - petroleum derivatives - should be in adequate supply, although difficulty has been experienced in obtaining field storage tanks, skid tanks, and drums.

#### Cotton Defoliants

The demand for chemical cotton plant defoliants is expected to be larger in 1952 than a year ago, depending, of course, on weather conditions. Production of the established defoliants should, in general, keep pace with the demand. Basic raw materials and production facilities for manufacturing the defoliant chemicals needed in 1952 appear to be adequate. Restrictions on the manufacture of drum containers for defoliants may be the most serious factor affecting defoliant supplies this year. Efforts to remedy the drum shortage continue to be made by the U. S. Department of Agriculture before allocating agencies.

Orderly purchasing of anticipated minimum quantities of defoliants well in advance of the time of actual need should facilitate equitable distribution to all areas where and when needed.

WARNING: Under no circumstances should containers used for packaging hormone-type weed killers be re-used for packaging insecticides or fungicides. In 1951, serious contamination of insecticides and fungicides resulted in several areas by the use of drums previously containing 2, 4-D and other hormone-type weed killers.

#### Machinery '

Shortages of machinery and equipment are not expected to restrict cotton production in 1952, although many new items will not be as readily available as they were during the past 2 or 3 years. The production of mechanical pickers and strippers will be larger this year than in 1951. However, production of farm equipment requiring relatively large proportions of such materials as copper, brass, aluminum, nickel, and zinc is likely to be more seriously curtailed than machinery fabricated principally of carbon steel. This includes sprayers and dusters and the more complex motorized equipment.

The over-all supply of new farm machinery and equipment available in 1952 may be smaller than in 1951. Therefore, costly delays during the rush will be avoided by checking all machines and equipment and, if necessary, reconditioning them well ahead of the season of use.

Farm machinery manufacturers have been urged to maintain production of mechinery repair parts at a high level and to promote their distribution to farm equipment dealers. Farmers, in turn, are urged to make all necessary repairs in advance of the rush season and to place orders for parts promptly, so that each piece of equipment will be ready to operate at peak efficiency when needed.

#### Manpower

The amount of labor that will be required to meet the 1952 cotton goels will probably approximate that employed in 1951. The supplies of labor from the usual sources are expected to be smaller in 1952 because of the loss of workers to nonfarm employment and to the Armed Services. On the other hand, additional cotton-harvesting equipment is expected to be available to reduce the need for hand workers.

From April 1950 to April 1951, farm population decreased about 1 million persons. BAE employment figures indicate that about 330,000 fewer workers were employed in agriculture in 1951 than a year earlier. Long-time trends point to a further reduction in the number of agricultural workers during 1952.

In order to minimize manpower problems in 1952, the fullest cooperation of employers, communities, and agencies concerned will be required. This task will require fuller recruitment of local and other sources of domestic labor; an increased willingness on the part of employers to hire and train inexperienced workers; a greater appreciation by local communities of the problems of agricultural production and increased participation on their part in farm manpower programs.

Recruitment of farm workers through Government programs is a primary responsibility of the Federal-State system of Employment Services. This includes recruitment of labor from local sources, routing of domestic workers between areas, and arranging for the employment of domestic offshore farm workers and foreign contract workers, when continental domestic workers are not available.

The Department of Agriculture will cooperate to the fullest extent with the U. S. Employment Service in efforts to meet farm manpower needs. The USDA has presented extensive production information to the Employment Service for use in over-all planning. Agricultural mobilization committees are taking similar steps at State and county levels. The Employment Service is currently making preseason estimates of needs and plans for intensified recruitment programs during the coming year.

Employers can contribute to the solution of labor problems by:

- 1. Determining in advance their needs for labor.
- 2. Placing orders for labor as early as possible with local Employment Service offices.
- 3. Making efficient use of labor wherever possible through fuller use of machinery, labor-saving practices, better management and supervision, and the training of inexperienced workers.
- 4. Advising the local Employment Service office in advance that labor will not be needed after a specified period, so that such labor can be promptly shifted to other employers and other areas.
- 5. Improving employment conditions providing better housing, assuring greater continuity of employment, and making available better community facilities.

American farmers have an enviable record in meeting production problems during emergency periods. The willingness of employers to use labor efficiently and to employ and train inexperienced labor where needed, and the full cooperation of communities and agencies concerned with the labor-supply problem will go far in reducing the uncertainties of an adequate labor force for cotton production in 1952.

Table 1. Cotton: Acreage, Yield, Supply and Distribution, United States, 1930-52.

u	r Totel		:14,986	; ;12,023	\$13,574	:14,556	:13,234	\$10,160	44	:12,324	:13,383	:11,343	\$10,183	:13,975	**	\$10,834	:12,295	:12,580	11,081	:11,575	44	:12,776	:13,569	111,317	:12,541	\$14,620	**	:14,626	:15,500	\$15,500	**
Distribution	Exports		8,251	. 6,760	8,708	1 8,419	r 7,534	£ 4,799	40	\$ 5,973	5,433	5,595	1 3,325	: 6,191	60	1,112	: 1,125	1,480	1,138	2,007	**	: 3,613	3,544	1,963	\$ 4,746	\$ 5,769	**	2 4,117	\$ 5,800	\$ 5,500	40
id	Consumption :	s 2/	6,735	5,263	4,866	6,137	5,700	5,361		6,351	7,950	5,743	6,858	7,784		9,722	11,170	11,100	9,943	9,568		9,163	10,025	9,354	7,795	8,851		10,509	9,700	10,000	
•	r Total	running bales	: 18,219 :	18,385 ;	1 23,106 :	: 22,512 :	\$ 076,03 \$	17,322 :	**	\$ 17,780 \$	: 17,799 :	: 22,909 :	: 23,288 :	: 24,673 :	**	\$ 23,050 \$	: 22,928 :	23,248 2	: 21,925 :	: 22,773 :	**	\$ 20,320 \$	: 16,113 :	: 14,327 :	: 17,832 :	2 21,441 :	**	: 16,942 :	17,690 r	: 18,390 :	10
1y	Imports	1	365	66	107	124	141	106		152	249	158	132	159		188	267	170	139	190		343	270	238	163	245		188	200	200	
Supply	Carryover :		2,753 :	4,530	6,370 1	9,678	8,165 :	7,744 &	**	7,208 ;	5,409 ;	4,499 8	11,533 ;	13,033 ;	40	10,564 :	12,166 :	10,640 :	10,657 \$	10,744 8	**	11,164 :	7,326 :	2,530 :	3,080	5,287	**	6,846 :	2,278	2,190	**
	Production:		15,101 :	13,756	: 16,629 :	12,710 s	12,664 :	s 9,472 s	**	: 10,420 :	12,141 :	18,252 ;	: 11,623 ;	11,481 ;	**	12,298 ;	10,495 ;	12,438 :	11,129 ;	11,839 ;	44	8,813 :	8,517 :	t 11,559 :	14,589 ;	15,909 :	40	<b>8</b> 06°6	15,212 :	16,000 :	**
Yield per	Planted Acre	Pounds	166	153	509	171	210	. 165		182	194	997	232	233		248	227	268	251	294		247	228	564	307	277		262	292	280	
: Acreage in :	:Cultivation :	res	43,893	45,329 *	39,110 :	36,494 :	40,248 :	27,860 :	**	28,063	30,627	34,090 \$	25,018 :	24,683	**	24,871 :	23,130 :	23,302 :	21,900 :	19,956 \$	**	17,533 :	18,157 :	21,560 :	23,253	27,714 :	**	18,629 :	27,997	28,000	"
	Eeginning :C		1925-29 Avg.:	1930	1931 :	1932	1933	1934 \$	**	1935	1936 .	1937	1938	1939	**	1940 :	1941 \$	1942 \$	1943 \$	1944 *	**	1945	1946	1947 \$	1948 \$	1949 😮	**			1952 4/ 2	40

1/ Supply minus distribution does not equal carryover following season because of city crop and destroyed cotton.

2/ Except imports, which are in equivalent 500-pound bales.

3/ Freliminary or estimated.

4/ Estimates based on goals.

Table 2. Planted acreage during specified years and 1952 goals, with comparisons

	ACR	EAGE IN CUL	TIVATION JULY	Y 1	Percent 1952
State	1946-50	:	1951		
	: Average		Estimated	1952 : Goals	Goal is of
	Average		housands	GOSTE	1951 Estimated Percent
	•	T	nousands		Percent
			7.7. (10 (10 (10 ))	•	
		A	LL COTTON		
Illinois	4	3	4	5	125
Missouri	492	449	570	550	96
Virginia	25	23	21	20	95
North Carolina	703	601	701	725	103
South Carolina	1,056	879	1,051	1,200	114
Georgia	1,285	1.054	1,414	1,300	92
4002522	1,200	1,001	1,111	1,000	32
Florida	33	32	66	75	114
Kentucky	13	10	13	15	115
Tennessee	749	644	812	820	101
Alabama	1,584	1,327	1,470	1,650	112
Mississippi	2,448	2,084	2,453	2,600	106
Arkansas	2,109	1,728	2,262	2,300	102
Louisiana	823	739	934	1,000	107
Oklahoma	1,121	965	1,551	1,600	103
Texas	8,351	7,048	12,486	11,915	95
New Mexico	199	176	327	325	99
Arizona	264	280	558	550	99
Nevada	••		1	•	-
California	644	586	1,302	1,350	104
		,			
United States	21,903	1/18,629	1/27,997	28,000	100
		EAMD TOMC	STAPLE COTTO	N 2/	
		EATTA LONG	DIAL DE COTT	T. 61	
Texas	9.7	43.1	25.0	34.0	136
New Mexico	3.9	17.0	14.5	20.0	138
Arizona	10.1	44.0	22.0	51.0	232
All Other	0.1	0.5	0.3	-	-
United States	23.8	104.6	61.8	105.0	170

<sup>1/</sup> Totals made before State figures were rounded.

<sup>2/</sup> American Egyptian, included in State and United States totals for "All Cotton".

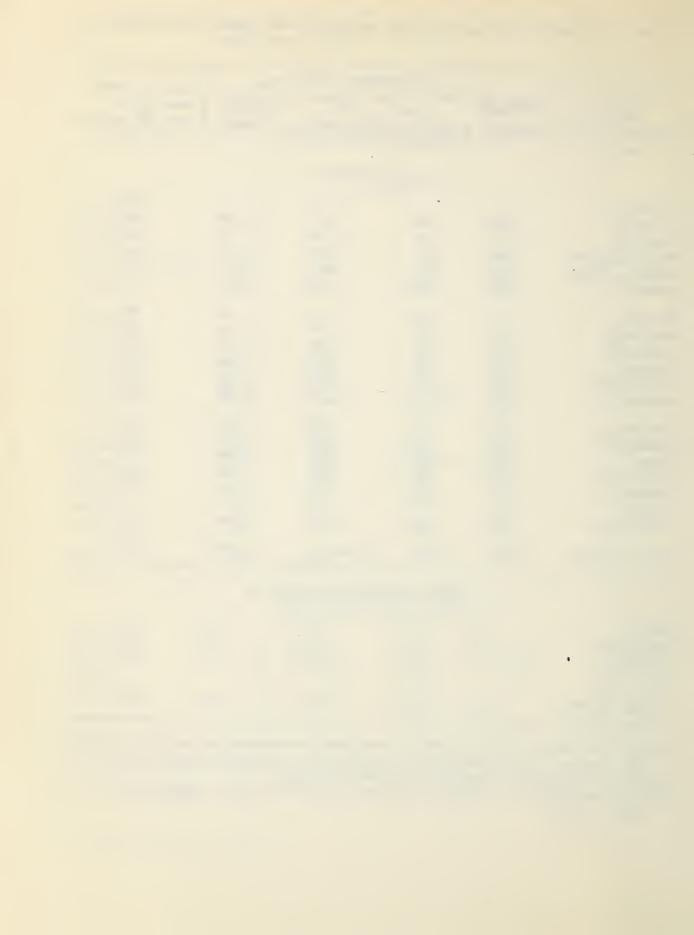
Table 3. Production during specified years and 1952 goals, with comparisons

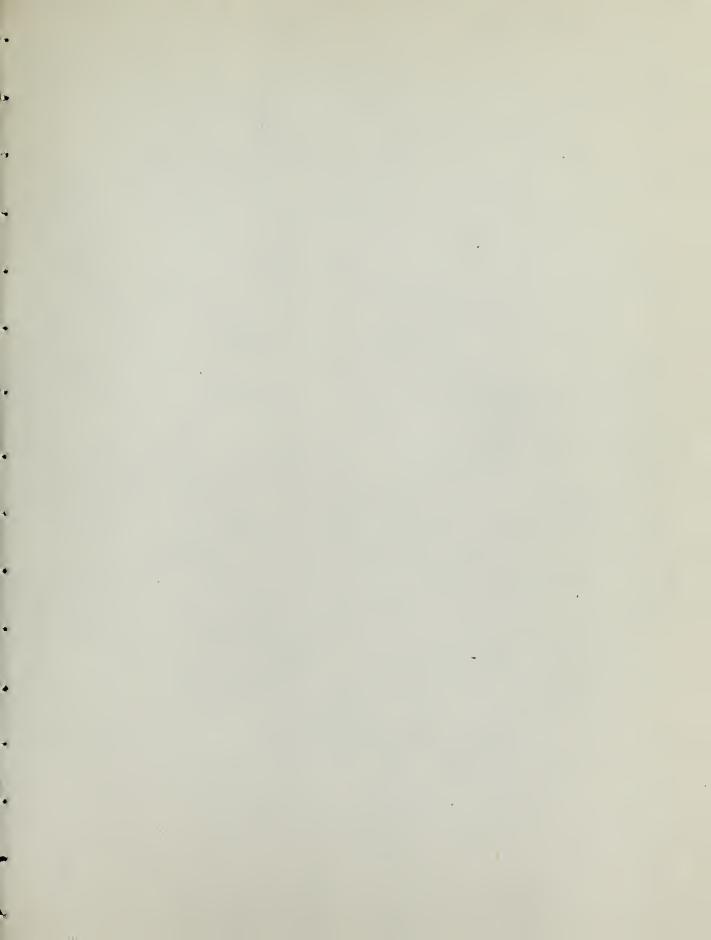
	:	Percent 1952			
State	: 1946-50		1951	: 1952	Goal is of
	: Average		The second secon		1951 Estimated
	:	- Thousand	running bale	8	Percent
		Ā	LL COTTON		
Illinois	2	1	1	2	200
Missouri	380	<b>26</b> 6	337	399	118
Virginia	17	5	16	13	81
North Carolina	452	190	559	477	85
South Carolina	637	414	867	735	85
Georgia	609	490	928	672	72
Florida	13	14	35	32	91
Kentucky	10	6	7	12	171
Tennessee	537	404	537	589	110
Alabama	858	573	909	927	102
Mississippi	1,523	1,307	1,601	1,724	108
Arkansas	1,416	1,072	1,245	1,487	119
Louisiana	503	419	750	652	87
Oklahoma	358	242	450	521	116
Texas	3,336	2,867	4,043	4,798	119
Few Mexico	204	189	289	323	112
Arizona	347	467	851	743	87
Nevada	•	-	2	-	-
California	892	982	1,784	1,894	106
United States	12,094	9,908	<u>2</u> /15,212	16,000	105
	Ī	EXTRA LONG	STAPLE COTTO	<u>3</u> /	
Texas	4.7	18.4	16.6	23.4	141
New Mexico	2.0	8.1	9.0	9.2	102
Arizona '	7.9	35.5	19.5	42.4	217
All Cther	-	0.2	0.3	-	-
United States	14.6	62.2	45.4	75.0	165

<sup>1/ 1946-50</sup> data represent ginnings, and are from Census Bureau; 1951 figures are running bale equivalents of December Crop Reporting Board estimate.

2/ Totals made before State figures were rounded.

<sup>3/</sup> American Egyptian, included in State and United States totals for "All Cotton".





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